Marked-up copy of the specification

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

Cancel claims 1, 10 and 19.

Amend claims 2-6, 8-9, 11-17 as follows:

~~1. A door, comprising:~~

~~a door frame;~~

~~a door leaf that swings on hinges in said door frame, with a front and a rear cover panel with at least one transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has specified, preferred locations or sites within it for transducer devices, which are entirely and exclusively affixed on the structural part at one of the locations or sites to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, the front and/or the rear cover panel of the door leaf being part of the stiff, light structural component.~~

2.(amended) ~~The door of claim 1,~~ A door, comprising:

a door frame; and

a door leaf that swings on hinges in said door frame and receives an electrical input signal, said door leaf including front and rear cover panels with a first transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for said first transducer device, which is entirely and exclusively affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component,

wherein the electrical input signals ~~are~~ is conducted from said door frame to said door leaf over at least one hinge.

3.(amended) The door of claim 2, wherein a switching element interrupts the conduction of said electrical input signal when the door is open.

4.(amended) A door, comprising:

a door frame;

a door leaf that swings on hinges in said door frame and receives an electrical input signal, said door leaf including front and rear cover panels with a first transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface perpendicular to its thickness to distribute resonance mode vibration components over at least one

surface, which has a first location within it for said first transducer device, which is entirely and exclusively affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component.

~~The door of claim 1,~~ wherein corresponding contacts for signal conduction of said electrical input signal are situated on said door leaf and on said frame associated therewith.

5.(amended) The door of claim ~~1~~4, further comprising a flexible, damping support element situated between said front and rear cover panels.

6.(amended) The door of claim 5, wherein said first transducers includes an electrodynamic inertial vibration drivers.

7. The door of claim 6, wherein said front and rear cover panels each have a surface that comprises criss-cross veneer.

8.(amended) A door, comprising:

a door frame;

a door leaf that swings on hinges in said door frame and receives an electrical input signal, said door leaf including front and rear cover panels with a first transducer device mounted therein, wherein said door leaf acts as a loudspeaker and includes a stiff, light structural part that maintains fed-in vibrational energy and by flexural waves propagates this energy in at least one active surface

perpendicular to its thickness to distribute resonance mode vibration components over at least one surface, which has a first location within it for said first transducer device, which is entirely and exclusively affixed on the structural part at said first location to set the structural part into vibration and to allow it to resonate, thus creating an acoustic radiator that delivers an acoustic output signal when it vibrates in resonance, said front and/or said rear cover panel of the door leaf being part of said stiff, light structural component.

~~The door of claim 1,~~ wherein said door leaf has at least one bass reflex opening.

9.(amended) The door of claim ~~1~~2, wherein said front cover panel is equipped with a clamping device that maintains ~~the~~ said stiff, light structural part of said~~the~~ front and/or rear cover panel under an adjustable amount of tension.

~~10. A door leaf that receives an electrical acoustic signal, comprising:~~

~~front and rear parallel cover panels that sandwich an acoustic sandwich core that includes a recess within which a transducer that receives an input signal indicative of the electrical acoustic signal is mounted, said transducer emits an audio signal that excites said front cover panel and said acoustic sandwich core such that said front cover panel and said acoustic sandwich core provide a multimodal resonance radiator that delivers an acoustic output signal to the area adjacent to said front cover panel.~~

11.(amended) The door leaf of claim 2~~10~~, wherein said first transducer comprises an electrodynamic inertial vibration driver.

12.(amended) The door leaf of claim 2~~10~~, wherein said first transducer comprises a piezoelectric driver.

13.(amended) The door leaf of claim 2~~10~~, wherein said stiff, light structural part ~~acoustic sandwich core~~ comprises a nomex honeycomb structure.

14.(amended) The door leaf of claim 2~~10~~, wherein said stiff, light structural part ~~acoustic sandwich core~~ comprises an aluminum honeycomb structure.

15.(amended) The door leaf of claim 2~~10~~, wherein said stiff, light structural part ~~acoustic sandwich core~~ comprises a high resistance foam.

16.(amended) The door leaf of claim 2~~10~~, further comprising a second transducer mounted in a second recess between said front and rear ~~parallel~~ cover panels, wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and said first and second transducers are separated by a flexible damping support element.

17.(amended) The door leaf of claim 11, further comprising an adjustable clamping device that controls the amount of tension in the region of said stiff, light structural part ~~acoustic sandwich core~~ to selectively change the acoustic properties of said stiff, light structural part~~front cover and said acoustic sandwich core~~.

18. The door leaf of claim 17, wherein said front cover and said rear cover include multi-layer pinewood veneer.

~~19. A door leaf that receives an electrical acoustic signal, comprising:~~

~~an acoustic core separated by front and rear parallel cover panels, wherein said acoustic core includes a recess within which a first transducer is mounted that receives an input signal indicative of the electrical acoustic signal, said first transducer emits an audio signal that excites said front cover panel and said acoustic core such that said front cover panel and said acoustic sandwich core provide a multimodal resonance radiator that delivers an acoustic output signal to the area adjacent to said front cover panel.~~

Add claims 20-23 as follows:

--20. The door leaf of claim 8, further comprising a second transducer mounted in a second recess between said front and rear cover panels, wherein said second transducer is orientated to drive said rear parallel cover panel to resonance in order to deliver a rearward launched acoustic output wave, and said first and second transducers are separated by a flexible damping support element.--

--21. The door leaf of claim 8, further comprising an adjustable clamping device that controls the amount of tension in the region of said stiff, light structural part to selectively change the acoustic properties of said stiff, light structural part.--

--22 The door leaf of claim 8, wherein said stiff, light structural part comprises a nomex

honeycomb structure.--

--23. The door of claim 8, further comprising a flexible, damping support element situated between said front and rear cover panels.--